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# NOTICE OF ALLOWANCE AND FEE(S) DUE

52450 7590 06/07/2010

KRIEG DEVAULT LLP ONE INDIANA SOUARE

EXAMINER TOTH, KAREN E

PAPER NUMBER

ARTHNIT 3735 DATE MAILED: 06/07/2010

SUITE 2800 INDIANAPOLIS IN 46204-2079

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/532.897 04/27/2005 Sigfrid Strassler ECPO-20

TITLE OF INVENTION: SENSOR SYSTEM FOR DETERMINING THE CONCENTRATION OF GLUCOSE IN BLOOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/07/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions.	or transmitting the ig the Patent, advar ierwise in Block 1,	ice orders and notifi by (a) specifying a	cation of r new corres	naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspo trate "FE	ondence address as E ADDRESS" for
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INDIANAPOLI	S, IN 46204-2079								(Depositor's name)
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APPLICATION NO.	FILING DATE		FIRST NAMED	INVENTOR		ATTORNEY DOCKET NO		CONFIRMATION NO.	
10/532,897 TITLE OF INVENTION	04/27/2005 E SENSOR SYSTEM FO	OR DETERMINING	Sigfrid Su THE CONCENTRA		GLUCOSE IN BLO	OOD	ECPO-20		9337
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION	FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	YES	\$755	\$300	)	\$0		\$1055		09/07/2010
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CFR 1.363).  Change of corresp Address form PTO/S1  Fee Address" ind PTO/SB/47; Rev 03-C Number is required.  ASSIGNEE NAME A	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	nge of Corresponder  Indication form ed. Use of a Custor	(I) the nam or agents OI (2) the nam registered at 2 registered listed, no na ON THE PATENT ( gnee data will apper s NOT a substitute for	es of up to R, alternative e of a single ttorney or a patent atto me will be (print or type ar on the por filing an	e firm (having as a gent) and the name meys or agents. If r printed.	members of use is ic	er a 2		has been filed for
Please check the appropr	iate assignee category or	categories (will not	be printed on the pat	tent):	Individual 🗖 Co	rporati	on or other private gro	oup entity	Government
4a. The following fee(s)  Issue Fee Publication Fee (N Advance Order	vo small entity discount p	permitted)	A check is Payment b	enclosed. y credit car	d. Form PTO-2038	is atta	ched. required fee(s), any de		
- 11	s SMALL ENTITY state	is. See 37 CFR 1.27.					FITY status. Sec 37 Ci		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be ac tes Patent and Trade	cepted from anyone omark Office.	other than t	he applicant; a regis	tered :	attorney or agent; or th	ne assigno	e or other party in
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APPLICATION NO	Э.	FILING DATE	FILING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.		
10/532,897		04/27/2005	Sigfrid Strassler	ECPO-20	9337		
52450	7590	06/07/2010		EXAMINER			
KRIEG DEV	/AUL	T LLP	TOTH, KAREN E				
ONE INDIAN	NA SQI	UARE	ART UNIT	PAPER NUMBER			
SUITE 2800 INDIANAPO	LIS, IN	i 46204-2079	3735 DATE MAII ED: 06/07/201	0			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 951 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 951 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/532.897 STRASSLER ET AL. Notice of Allowability Examiner Art Unit KAREN E TOTH 3735 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the remarks and amendment filed 7 May 2010. The allowed claim(s) is/are 24,26-31 and 33-46. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/Patricia C. Mallari/ Primary Examiner, Art Unit 3735 Application/Control Number: 10/532,897 Page 2

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#### DETAILED ACTION

#### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes
and/or additions be unacceptable to applicant, an amendment may be filed as provided
by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be
submitted no later than the payment of the issue fee.

The application has been amended as follows:

To correct the inadvertent omission of claim 25 from the claim listing, please add:

"25. (Cancelled)"

between claims 24 and 26.

Please delete the entire current abstract and replace it with the following:

--The sensor system comprises an implantable sensor and a user device associated with it. A sensitive liquid is enclosed in the sensor, into which glucose can penetrate. The viscosity of the mixture of sensitive liquid and glucose is measured. The user device, which controls the measurement and its evaluation, is a portable device wom externally on the skin. The viscosity is measured based on the rotation of a measuring element driven by a driving magnet, both disposed in the sensor. The rotation of the driving magnet is analysed based on its decay behaviour following switch-off of the driving magnet. In a second embodiment, the viscosity is measured based on the oscillatory behaviour of an oscillating element excited to oscillate by a magnet, both disposed in the sensor. The oscillatory behaviour is analysed based on the decay behaviour of the oscillating element following switch-off of the magnet.--

# Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

The prior art of record fails to anticipate or make obvious the invention of claims 24, 26-31, 33, and 34, including, inter-alia, a blood glucose concentration sensor system

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comprising an implantable sensor in the form of a glucose-penetrable ampoule containing a sensitive liquid and a user device configured to be worn on a user's skin that controls measurement of the viscosity of the mixture created by the glucose and sensitive liquid and evaluation of the measurement, where the viscosity is measured by observing the oscillatory behavior of an oscillating element disposed in the implantable sensor and excited to oscillation by an oscillating magnetic field, and where the sensor also includes a plastic part disposed in the implantable sensor that confines the liquid volume, supports the oscillating element, and has an elongated bore into which an arm disposed on the magnet projects such that the liquids are mixed, in combination with all other limitations in the claims.

The prior art of record fails to anticipate or make obvious the invention of claims 35-46, including, *inter-alia*, a blood glucose concentration sensor system comprising an implantable sensor in the form of a glucose-penetrable ampoule containing a sensitive liquid and a user device configured to be wom on a user's skin that controls measurement of the viscosity of the mixture created by the glucose and sensitive liquid and evaluation of the measurement, where the viscosity is measured by observing the rotation of a measuring element disposed in the implantable sensor, where the element is driven by a driving magnet also disposed in the implantable sensor, and the rotations are analyzed based on their decay behavior after the driving magnet is turned off, in combination with all other limitations in the claims.

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Ballerstadt (US 7226414) discloses similar inventions, as discussed in prior Office Actions, but does not disclose a mixing arm with a support for the oscillating element, or using decay behavior to determine viscosity.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAREN E. TOTH whose telephone number is (571)272-6824. The examiner can normally be reached on Mon thru Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia C. Mallari/ Primary Examiner, Art Unit 3735

/K. E. T./ Examiner, Art Unit 3735